



**C20-PET-504**

**7669**

**BOARD DIPLOMA EXAMINATION, (C-20)**

**OCTOBER / NOVEMBER—2023**

**DPET – FIFTH SEMESTER EXAMINATION**

**HSE AND FF IN PETROLEUM INDUSTRY**

*Time : 3 Hours ]*

*[ Total Marks : 80*

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**PART—A**

3×10=30

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Write any two environmental regulation acts in a petroleum industry.
2. What is mean by waste migration?
3. Define risk assessment.
4. Write down the impacts of cadmium and mercury on humans and animals.
5. What is mean by solidification?
6. Write a short note in petroleum wastes.
7. What are fire losses?
8. Define flash and fire point.
9. Write a short note on fire pumps.
10. Write a short note on portal fire extinguishers.

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **eight** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

**11.** (a) Explain about the overview of drilling process.

**(OR)**

(b) Discuss about air emissions.

**12.** (a) Discuss about the impact of drilling and production operations.

**(OR)**

(b) Explain briefly about the acoustic impacts and effects of offshore platforms.

**13.** (a) Discuss about the different methodologies for treatment of water.

**(OR)**

(b) What are the different waste disposal methods in petroleum industry?

**14.** (a) Explain about the flammability limits and flammable range.

**(OR)**

(b) Discuss about the causes of fire and flame progression.

**15.** (a) Explain about the water suppression system.

**(OR)**

(b) Explain about the water spray systems and water flooding system.

**PART—C**

10×1=10

- Instructions :** (1) Answer the following question.  
(2) The question carries **ten** marks.  
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

**16.** Explain about the overview of environmental issues.

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